

What is claimed is:

1. A scanner comprising:

a table having a subject mount surface for mounting a sheet-like subject thereon;

5 a scanner head arranged opposite to said subject mount surface of said table and linearly movable along said subject mount surface, said scanner head including a line imager for imaging said subject mounted on said subject mount surface;

10 a head drive mechanism including a drive shaft extending along said subject mount surface for driving said scanner head straight along said drive shaft;

a linear scale for providing a signal to detect a location of said scanner head in the direction of said
15 drive shaft; and

image capture means for capturing an image of said subject from said imager based on said signal output from said linear scale.

2. The scanner according to claim 1, wherein said
20 table comprises a metal plate mounted on a base frame.

3. The scanner according to claim 1, wherein said table includes an attractive mechanism for attracting said subject to secure it on said subject mount surface.

4. The scanner according to claim 1, wherein said
25 table includes a positioning and securing pin on the periphery for positioning said subject on said subject mount surface.

204020 55T900T 4006195 020402

5. The scanner according to claim 2, wherein said scanner head includes a drive frame movably supported on both sides of said base frame, interposing a pair of linear bearings therebetween, for mounting said imager thereon,

said head drive mechanism comprising a ball screw mechanism including a ball screw as said drive shaft located at about the midpoint between said pair of linear bearings and in parallel with said linear bearings.

6. The scanner according to claim 1, wherein said linear scale is arranged in the vicinity of said drive shaft and in parallel with said drive shaft.

7. The scanner according to claim 2, wherein said scanner head includes:

a drive frame movably supported on both sides of said base frame, interposing a pair of linear bearings therebetween, for mounting said imager thereon; and

an optical system for shifting the optical path by about 90° to introduce an optical image of said subject mounted on said subject mount surface of said table into said imager.

8. The scanner according to claim 1, wherein said imager comprises a CCD line sensor.

9. The scanner according to claim 1, wherein said table includes a flat light emissive plate having a light emissive surface as said subject mount surface.

10. A scanner comprising:

20250619 09:04:03

a table having a subject mount surface for mounting a sheet-like subject thereon;

a base frame for mounting said table thereon;

a scanner head arranged opposite to said subject
5 mount surface of said table and linearly movable along said subject mount surface, said scanner head including a line imager for imaging said subject mounted on said subject mount surface;

a head drive mechanism including a drive shaft
10 extending along said subject mount surface for driving said scanner head straight along said drive shaft;

a linear scale for providing a signal to detect a location of said scanner head in the direction of said drive shaft; and

15 image capture means for capturing an image of said subject from said imager based on said signal from said linear scale,

wherein said scanner head includes a drive frame movably supported on both sides of said base frame,
20 interposing a pair of linear bearings therebetween, for mounting said imager thereon, said drive frame of said scanner head having a support mechanism for slidably supporting said table within certain distances from both sides of said base frame on the upper surface thereof.